

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.             | FILING DATE          | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO.        |  |  |
|-----------------------------|----------------------|----------------------|-------------------------|-------------------------|--|--|
| 10/633,021                  | 07/31/2003           | Inderiit Singh       | NVIDP235/P000846        | 4737                    |  |  |
| 28875                       | 7590 08/10/2005      |                      | EXAM                    | EXAMINER                |  |  |
| Zilka-Kotab, PC             |                      |                      | VU, HUNG K              |                         |  |  |
| P.O. BOX 721<br>SAN JOSE, C | 120<br>CA 95172-1120 |                      | ART UNIT                | PAPER NUMBER            |  |  |
| •                           |                      |                      | 2811                    | 2811                    |  |  |
|                             |                      |                      | DATE MAILED: 08/10/2003 | DATE MAILED: 08/10/2005 |  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | $\sim$        |
|---|---------------|
| Ĺ | $\mathcal{L}$ |
| ١ | 9(            |
| • | 1 ~           |
| ) | 16            |

## Advisory Action Before the Filing of an Appeal Brief

| Application No. | Applicant(s) | _ |
|-----------------|--------------|---|
| 10/633,021      | SINGH ET AL. |   |
| Examiner        | Art Unit     | _ |
| Hung Vu         | 2811         |   |
|                 |              |   |

| before the rilling of all Appear Brief   | Examiner   | Art Unit  |                                  |  |  |  |  |
|--|--|---|----------------------------------|--|--|--|--|
|  | Hung Vu  | 2811  |                                  |  |  |  |  |
| The MAILING DATE of this communication appe  | ars on the cover sheet with the c  | orrespondence add   | ress                             |  |  |  |  |
| THE REPLY FILED <u>18 July 2005</u> FAILS TO PLACE THIS APP  | LICATION IN CONDITION FOR AL   | LOWANCE.  |                                  |  |  |  |  |
| The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:   |  |   |                                  |  |  |  |  |
| a) The period for reply expires 3 months from the mailing date   | )  The period for reply expires <u>3 months from the mailing date of the final rejection.</u>  |   |                                  |  |  |  |  |
| no event, however, will the statutory period for reply expire I  | no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  |   |                                  |  |  |  |  |
| TWO MONTHS OF THE FINAL REJECTION. See MPEP 7  | Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). |   |                                  |  |  |  |  |
| Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |   |                                  |  |  |  |  |
| NOTICE OF APPEAL  2. The Notice of Appeal was filed on A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).   |  |   |                                  |  |  |  |  |
| AMENDMENTS   | harandara aharaharan filikan a bajat   | will not be antoned b                                     |                                  |  |  |  |  |
| 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below);   |  |   |                                  |  |  |  |  |
| (c) They are not deemed to place the application in be appeal; and/or  |  |   | the issues for                   |  |  |  |  |
| (d) They present additional claims without canceling a NOTE: See Continuation Sheet. (See 37 CFR 1.1   |  | ected claims.   |                                  |  |  |  |  |
| 4. The amendments are not in compliance with 37 CFR 1.1  | 21. See attached Notice of Non-Co  | ompliant Amendment  | (PTOL-324).                      |  |  |  |  |
| <ul><li>5. Applicant's reply has overcome the following rejection(s)</li><li>6. Newly proposed or amended claim(s) would be a</li></ul>  |  | timely filed amandme                                      | ant canceling the                |  |  |  |  |
| non-allowable claim(s).  |  |   |                                  |  |  |  |  |
| 7.  For purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is pro The status of the claim(s) is (or will be) as follows:  | ⋈ill not be entered, or b)   | II be entered and an e                                    | explanation of                   |  |  |  |  |
| Claim(s) allowed:<br>Claim(s) objected to:   |  |   |                                  |  |  |  |  |
| Claim(s) rejected: <u>1-14,16-18 and 24-30</u> .   |  |   |                                  |  |  |  |  |
| Claim(s) withdrawn from consideration: <u>15 and 19-23</u> .  AFFIDAVIT OR OTHER EVIDENCE  |  |   |                                  |  |  |  |  |
| <ol> <li>The affidavit or other evidence filed after a final action, be because applicant failed to provide a showing of good ar was not earlier presented. See 37 CFR 1.116(e).</li> </ol>  | ut before or on the date of filing a North sufficient reasons why the affidate   | otice of Appeal will <u>no</u><br>vit or other evidence i | ot be entered<br>s necessary and |  |  |  |  |
| <ol> <li>The affidavit or other evidence filed after the date of filing<br/>entered because the affidavit or other evidence failed to<br/>showing a good and sufficient reasons why it is necessal</li> </ol>  | overcome <u>all</u> rejections under appe  | al and/or appellant fa                                    | ils to provide a                 |  |  |  |  |
| 10.   The affidavit or other evidence is entered. An explanation   |  |   |                                  |  |  |  |  |
| REQUEST FOR RECONSIDERATION/OTHER  11. ☑ The request for reconsideration has been considered by See Attachment.  | ut does NOT place the application i  | n condition for allowa                                    | nce because: ·                   |  |  |  |  |
| 12. Note the attached Information Disclosure Statement(s).   | (PTO/SB/08 or PTO-1449) Paper I  | No(s)   |                                  |  |  |  |  |
| 13.  Other:  |  | Huma Wes  |                                  |  |  |  |  |
|  |  | Hung Un   | <del></del>                      |  |  |  |  |
| •  |  | Primary Examiner  |                                  |  |  |  |  |
|  |  |   |                                  |  |  |  |  |

Continuation of 3. NOTE: Newly proposed independent claim 1 by incoporating the limitations of claims 25 and 28 which are separately depend on claim 1 into claim 1, and extensive amendments to claims 16-18 raise the new issues of the remaining claims that would require further consideration and/or search.

## Response to Arguments

Continuation of 11.

It is argued that any attempt to position the metal layer of TAnaka, at least partially, directly above the active circuit would render an unworkable device as the design of Tanaka is simply not equipped to meet such design, for example, the deficient number of layers to accomplish the same in Tanaka. This argument is not convincing because Tanaka discloses the structure with the multilayer interconnections. Further, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

It is argued that Tanaka merely recognizes the problem of bond density, disconnection, etc.. but does not disclose the frame ensures that bonds are capable of being placed over the active circuit without damage. This argument is not convincing because Tanaka discloses the method of forming the frame to prevent the crack formed in the insulating interlayer, therefore, it is inherent that the frame ensures that bonds are capable of being placed over the active circuit without damage.

It is argued that Applicant's Admitted Prior Art of Figures 1 – 2 do not disclose a plurality of metal layers positioned under the active circuit. This argument is not convincing because Applicant's Admitted Prior Art of Figures 1 – 2, disclose a plurality of metal layers (M1 Application/Control Number: 10/633,021 Page 3

Art Unit: 2811

because Applicant's Admitted Prior Art of Figures 1 – 2, disclose a plurality of metal layers (M1 – M4) positioned under the active circuit. Note that the claimed language does not specifically state whether the plurality of metal layers are directly under the active circuit.